

**A. Cover Sheet** (Attach to front of proposal.)

1. Specify: ☐ agricultural project or ☐ individual application or  
☒ urban project ☐ joint application
2. Proposal title—concise but descriptive: Groundwater Recovery Enhancement and Treatment (GREAT) Program Groundwater Desalter
3. Principal applicant—organization or affiliation: City of Oxnard
4. Contact—name, title: Ken Ortega, Water Superintendent
5. Mailing address: 251 South Hayes Avenue, Oxnard, CA 93030
6. Telephone: (805) 385-8139
7. Fax: (805) 385-8137
8. E-mail: ken.ortega@ci.oxnard.ca.us
9. Funds requested—dollar amount: \$ 665,000
10. Applicant cost share funds pledged—dollar amount: \$ 82,860
11. Duration—(month/year to month/year): 8/01 to 8/02
12. State Assembly and Senate districts and Congressional district(s) where the project is to be conducted:  
State Assembly District #37, State Senate District #19,  
Congressional District #23
13. Location and geographic boundaries of the project: The groundwater desalter will be located at a to-be-determined site in the City of Oxnard.
14. Name and signature of official representing applicant. By signing below, the applicant declares the following:  
— the truthfulness of all representations in the proposal;  
— the individual signing the form is authorized to submit the application on behalf of the applicant;  
— the applicant will comply with contract terms and conditions identified in Section 11 of this PSP.
- Ken Ortega 2/14/2001  
(printed name of applicant) (date)
- [Signature]  
(signature of applicant)



## **B. SCOPE OF WORK**

### **Executive Summary**

The City of Oxnard is currently developing a multi-faceted regional program to address water supply issues identified as part of its master planning process. This program, entitled the Groundwater Recovery Enhancement And Treatment (GREAT) Program, brings together municipal and agricultural users and imported surface water and local groundwater wholesalers to efficiently allocate water resources among the entities. The portion of the Program that is applicable under the Water Use Efficiency Program is a groundwater desalter that will enable the City to help stabilize its rates, reduce its dependency on imported state water, and have positive influence on the Bay-Delta System.

### **Relevance and Importance**

The City of Oxnard (City) provides potable water service to domestic, commercial, and industrial users in its service area. The distributed water consists of a blend of high quality imported surface water from the Calleguas Municipal Water District (CMWD) and local groundwater that is provided by the City's wells and/or from the United Water Conservation District (UWCD). Historically, the blend ratio has varied, but the City is intent on maintaining a TDS level in the blended product between 600 and 700 mg/L, which translates approximately to a 1:1 blend ratio.

As part of its water system master planning process, the City has developed projections of its future water needs. Using the year 2020 as its build-out condition, the City has estimated that its water demands will increase from its current level of approximately 29,000 acre-feet per year (AFY) to approximately 45,000 AFY.

To meet these additional needs, the City has turned to CMWD and UWCD, who have either just completed or are in the process of completing their own master plans. Deliveries of surface water from CMWD were thought to be infrastructure-limited only, but as part of its rate restructuring process, preliminary discussions have focused on a delivery cap to the City of 12,000 AFY. Groundwater resources from both the City's wells and those of UWCD are also limited based on allocations determined by the Fox Canyon Groundwater Management Agency (FCGMA). The FCGMA was organized to manage the area's groundwater resources by protecting the quantity and quality of local groundwater for the benefit of all users, as well as striving to balance water supply and demand by the year 2010. As a result of overdrafting, the FCGMA developed groundwater allocations for all of the pumpers in the basin. The framework imposed by the FCGMA will also result in 5 percent reductions in groundwater pumping in years 2005 and 2010 that will further decrease the City's total available groundwater resources (both their wells and deliveries available from UWCD) to approximately 11,000 AFY.

To make up the difference between supply and demand, the City has formulated a project called the Groundwater Recovery Enhancement And Treatment (GREAT) Program. This program will reallocate water resources among domestic and agricultural users allowing for the more efficient use of water. The GREAT Program starts with the development of a water recycling system. The Oxnard Wastewater Treatment Plant would be upgraded from a secondary to a tertiary

treatment process. This water would then be distributed to agricultural users that are currently served by UWCD's Pumping-Trough-Pipeline (PTP). The PTP was implemented to shift farmers from their groundwater wells to a surface water source. This would allow the groundwater basin to recover from overdrafting that has resulted in depressed groundwater levels and seawater intrusion.

Groundwater that had previously been delivered to PTP users would then be made available to the City for domestic use. However, in order to meet the City's quality requirements, the groundwater would require some demineralization. A desalting facility would be developed that could produce the appropriate quality water and then pump into the City's distribution system.

Brine generated at the desalination facility would be pumped to wetlands that are being developed by CMWD. Other industries along the pipeline alignment that generate brine would be allowed to discharge into the brine line in order to improve the quality of the City's recycled water.

During periods of low recycled water demand, the recycled water could be treated to Department of Health Services groundwater recharge standards, and then direct injected into the aquifer. This would allow the City to accrue groundwater credits with the FCGMA and develop a cache that could be called upon during emergency conditions. Treatment of recycled water could be accomplished at the Port Hueneme Water Agency's (PHWA) Brackish Water Reclamation Demonstration Facility. The City has the option of taking over this facility, but would need to provide PHWA with an alternative source of potable water. This potable water would come from the groundwater desalination facility.

The focus of this application is being placed on the design of the groundwater desalination facility. This facility will allow the City to develop local resources that will reduce the demand for water from the Bay-Delta. It will also assist the two wholesale agencies, CMWD and UWCD, by allowing them to defer construction of new capital facilities that would be needed to supply additional water to the City. County of Ventura officials have also expressed an interest if the facility could supply water to existing mutual water companies in the area, who may have limited resources to address future water quality regulations.

The City is currently in the process of conducting its feasibility study to size each of the program's components. This study is slated for completion in June 2001. Design of the individual components and environmental documentation for the project are scheduled shortly thereafter. The exact scope of work for the design of the groundwater desalination system will be dependent on the findings of the feasibility study, but will be performed by an outside consultant. City staff would be responsible for coordinating the design of the desalination facility with the other GREAT Program elements. A preliminary scope of work for the Groundwater Desalination design project would include the following items:

- Project management
- Design (10, 50, 75, 90, and 100 percent submittals)
- QA/QC

- Permitting
- Interagency Agreements
- Public outreach

### **Technical/Scientific Merit, Feasibility, Monitoring, and Assessment**

The City has engaged a consultant team to develop a comprehensive feasibility study that will review the different alternatives for each component of the program and select the most cost-effective collective solution. Members of the consultant team, City staff, and representatives from CMWD, UWCD, PHWA, and FCGMA will review the feasibility report for technical adequacy and conformance with overall project goals. The feasibility study is scheduled for completion in June 2001 and will define the key design parameters for the groundwater desalination facility.

The project consultant will perform the design and provide quality assurance/quality control for the Groundwater Desalination project. The City will be responsible for providing oversight and may rely on representatives from CMWD, UWCD, PHWA, and/or FCGMA for supplemental review of the design as it proceeds.

The project schedule for design is shown in Attachment A. Quarterly expenditure projections are as follows:

Estimated Quarterly Expenditures	
Quarter	Estimated Expenditures
3 <sup>rd</sup> Quarter 2001	\$186,965
4 <sup>th</sup> Quarter 2001	\$149,572
1 <sup>st</sup> Quarter 2002	\$149,572
2 <sup>nd</sup> Quarter 2002	\$149,572
3 <sup>rd</sup> Quarter 2002	\$112,179
Total	\$747,860

Monitoring and assessment of the project will be based on the delivery of reviewable draft plans, specifications, and cost estimates. Members of the project consultant team, City staff, and representatives from the participating agencies will review the documents for adequacy. The ultimate goal of the project is to deliver a set of contract documents that will enable the City to bid, construct, and eventually operate the groundwater desalter.



## **C. OUTREACH, COMMUNITY INVOLVEMENT, AND INFORMATION TRANSFER**

The groundwater desalination element is not intended to have a separate outreach program and would be included as part of the outreach for the GREAT Program. Because the Program is intended to address a citywide issue, there isn't a nexus for specifically targeting disadvantaged communities. One benefit, however, is that if the Program moves forward as conceptualized, it will allow the City and PHWA to combine their services and spread costs over a larger customer base. This should cushion the impact felt by ratepayers and help stabilize rates over the long-run by reducing dependency on what is relatively expensive imported water. There are no local tribal entities that can be cost-effectively served.

Based upon the capacity of the groundwater desalination facility, there may be a need for additional City staff to man the facility. Until that capacity is determined in the on-going feasibility study, it is premature to estimate additional manpower requirements. As a minimum, the City's existing eight (8) pumping plant and water quality employees would require some training to operate, maintain, and monitor the facility. These employees range in level from supervisors to staff level.

With regard to information dissemination, the City is intent in publicizing the Program beginning at the feasibility stage. This effort could be an on-going process with educational tours of the facility offered after it was placed on-line. Currently, the City is preparing a video and brochures describing the GREAT Program as currently conceptualized. These would be updated as the project components become further defined. The City has formulated a standing committee and involved the City's public information officer to assist in the outreach effort. The City's Water Department has also talked of creating their own website to provide the public with yet another avenue for learning about the GREAT Program.

Copies of letters addressed to the FCGMA, CMWD, PHWA, and UWCD are enclosed as Attachments B-1 to B-4.

## **D. QUALIFICATIONS OF THE APPLICANTS, COOPERATORS, AND ESTABLISHMENT OF PARTNERSHIPS**

Ken Ortega will manage the overall project effort. Mr. Ortega is currently the City's Water Superintendent and has over 13 years of water resource planning, design, construction, budgeting, operations, and management experience. A copy of Mr. Ortega's resume is included as Attachment C-1.

Lynn Takaichi will manage the consultant design team. Mr. Takaichi has over 28 year of experience in the water industry. He has worked on several desalination facilities, including PHWA's Brackish Water Reclamation Demonstration Facility. He specializes in projects with complex institutional arrangements. A copy of Mr. Takaichi's resume is included as Attachment C-2.

The Groundwater Desalination Facility represents just one element of the GREAT Program. In order for the whole Program to succeed, cooperation with FCGMA, CMWD, PHWA, and UWCD will be needed. Discussions on a conceptual level indicate support from each of these

entities for the Program. The following describes the responsibilities of the external cooperators and how they would participate:

United Water Conservation District – Domestic and agricultural water wholesaler. UWCD pumps and sells groundwater to the City of Oxnard and the Port Hueneme Water Agency for potable use via the Oxnard-Hueneme (OH) Pipeline and to agricultural users via the Pumping Trough Pipeline (PTP). UWCD is providing general oversight for consistency with their operations, but has also expressed an interest in participating in the groundwater desalination facility pending the feasibility report.

Calleguas Municipal Water District – CMWD is the local wholesaler of State Project Water to both City of Oxnard and the PHWA. They are providing general oversight for consistency with their master plan and may be able to contribute avoided capital construction costs to the construction of the groundwater desalination pending the outcome of the feasibility study.

Port Hueneme Water Agency – The PHWA supplies water to the City of Port Hueneme, Channel Islands Beach Community Services District, Naval Construction Battalion Center – Port Hueneme, and Naval Air Weapons Station – Point Mugu. If the BWRDF were taken over by the City, then a new source of potable water would be needed for each of the PHWA's customers. The likely candidate in that instance is the City's groundwater desalination facility.

Fox Canyon Groundwater Management Agency – The FCGMA is charged with addressing overdraft and seawater intrusion issues in the Oxnard Plain. Their involvement will be centered on groundwater credit issues.

The on-going feasibility study will be used to identify formal partnerships that are needed for the project to move forward. Preliminary indications are that as a minimum, partnerships will need to be developed between the City and PHWA regarding water service areas (new JPA or City annexes PHWA service area) and between the City, FCGMA, and UWCD to determine how groundwater credits could be transferred and how the groundwater can be extracted from the aquifer.

## **E. COSTS AND BENEFITS**

### **Budget Summary and Breakdown**

The requested budget for this project is \$665,000. The City and other agencies are supplying \$82,860 of in-kind services. A copy of the project budget is enclosed as Attachment D.

### **Budget Justification**

Design of the groundwater facilities by consultants makes up the bulk of the budget (\$588,000). The estimate of the design costs were based on a 6.2 mgd facility with provisions for future expansion. Additional consultant budget was allocated for permitting (\$50,000). This effort is intended to be part of the overall GREAT Program permitting and represents that portion related to the groundwater desalter only. Attorney fees of \$20,000 were allocated to help draft the necessary agreements or memorandum of understanding between the City and PHWA, UWCD,

and FCGMA, as necessary. Finally, \$7,000 of consultant fees was allocated to prepare brochures and other publicity materials for outreach purposes.

The remainder of the costs consists of salaries and fringe benefits for City staff and UWCD, PHWA, and CMWD representatives to manage and oversee the project.

### **Benefit Summary and Breakdown**

Until the feasibility study is complete it is premature to determine the actual extent of the project outcomes and benefits. This is tied primarily to the capacity of the groundwater desalter. For the purposes of this grant application, generalized assumptions (listed in the next section) can be made to illustrate the beneficial impacts of this facility.

Conversion of the BWRDF to an advanced wastewater treatment facility and delivery of recycled water for in-lieu use or groundwater recharge could result in 3.6 mgd of groundwater for potable use by the City. Taken over the course of the year, 3.6 mgd is just over 4,000 acre-feet. Assuming 0.5 acre-feet per year (AFY) are enough for a typical family in Oxnard, the Groundwater Desalination Facility would provide enough water for approximately 8,000 families or some combination of businesses and families.

The 4,000 AFY is also water that is new to the regional water balance. This additional supply will also help defer the need for additional imported water supplies from CMWD and will result in a one-for-one reduction in deliveries from the Bay-Delta. For City consumers, the cost of potable water could be stabilized over the long run by avoiding the need to purchase relatively expensive imported surface water when local groundwater resources are available. Similarly, CMWD may be able to avoid building new delivery infrastructure if the City's demand for imported water can be reduced. Precise avoided infrastructure costs to CMWD are not calculable until CMWD determines what it intends to deliver to the City under its future price restructuring program.

Ancillary benefits may also be generated. If the PHWA's BWRDF facility is included in the GREAT project, then the desalination facility will need to provide the PHWA with water. This may allow the City and the PHWA to combine service areas and spread rate impacts over a larger customer base. If it is possible to include the customers served by several local mutual companies, then the customer base can be further expanded. The mutual customers would also benefit from receiving water produced by an agency that is preparing for future water quality regulations.

### **Assessment of Costs and Benefits**

Assumptions in the preceding section include the following:

- BWRDF is taken over by the City, but not expanded.
- Groundwater recharge and in-lieu deliveries of recycled water.
- Product water recovery rate is 85 percent.
- Split stream treatment is adequate for City potable water quality.
- Imported water costs are \$528/AF

- Desalinated groundwater costs are \$400/AF (includes treatment cost, blending, pumping) for 4,000 AFY.
- Six percent discount rate and a 30-year recovery period.
- Increases in operations and maintenance costs are covered by water rates.
- Imported and desalinated groundwater costs will rise comparably.

Quantifiable Costs and Benefits	
Cost/Benefit	Present Value
Design	(\$748,000)
Construction	(\$5,849,000)
Avoided imported water costs	\$7,048,000

#### Non-Quantified Costs and Benefits

1. 4,000 AFY less demand for imported water from the Bay-Delta.
2. Avoided infrastructure costs by UWCD, CMWD.
3. Rate stabilization for City (and possibly PHWA) ratepayers
4. Possible improved service for existing mutual water company customers

Note: Pending completion of the City's Water System Master Plan and the GREAT Program feasibility study, items 2-4 could be quantified.



Attachment A  
GREAT Program Schedule



TASK	DUE DATE	PROJECTED COST	2001		2002		
			3rd Qtr	4th Qtr	1st Qtr	2nd Qtr	3rd Qtr
Project Management	09/01/02						
10 Percent Design	10/01/01						
50 Percent Design	02/01/02						
75 Percent Design	04/15/02						
90 Percent Design	07/01/02						
100 Percent (Final) Design	09/01/02						
QA/QC	09/01/02						
Permitting	09/01/02						
Interagency Agreements	08/01/02						
Public Outreach	09/01/02						

Inserts B-1 through B-4

## **Ken J. Ortega, P.E.**

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Water Superintendent

### **Education**

California Polytechnic State University, San Luis Obispo, 1988  
San Luis Obispo, California  
Bachelor of Science, Civil Engineering

Study in Advance Water Resource Planning, Water Education Foundation  
Study in Water Rate Setting, University of Florida

### **Registration**

Civil Engineer in California

### **Professional Summary**

Ken Ortega will manage the overall project effort. Mr. Ortega is currently the City's Water Superintendent and has over 13 years of water resource planning, design, construction, contract administration, budgeting, operations, and management experience. Mr. Ortega is directly responsible for all major planning and design projects relating to securing reliable water resources for the City of Oxnard.

Mr. Ortega also has broad public and private work experience. He currently is Water Superintendent for the City of Oxnard, but has also served as Deputy Public Works Director/Assistant City Engineer for the City of Santa Paula, Engineering Supervisor/Assistant General Manager for Santa Paula Water Works, Ltd. (a subsidiary of Park Water Companies), and Assistant Civil Engineer for Boyle Engineering Corporation.

Mr. Ortega's success record in advanced planning and project administration has served him well, especially in the areas of consensus planning and garnering legislative and financial support to advocate on behalf of regional project solutions.

### **Accomplishments and Related Work Experience**

Mr. Ortega's accomplishments and work experience includes:

- Advance planning, design, construction, organization and management functions of the City of Oxnard Water Division.
  - Preparation and administration of budgets, estimates and controlled expenditures of appropriations; responsible for preparing and administering the City's Five Year Capital Improvement Program.
  - Planning, design and construction of water treatment and water distribution systems, pump stations, reservoirs, wastewater treatment, wastewater collection and pumping systems, storm drainage and other aspects of general civil and mechanical engineering.
  - Provided design services for the City of Los Angeles' Sunset Sewer Pumping Plant and Force Main project
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- Designed approximately 1.5 miles of 33-inch diameter storm drain system for the County of Los Angeles Public Works Department
- Provided design and planning services for approximately 50-miles of water, wastewater and reclaimed water infrastructure for the Rosamond Community Services District
- Provided design assistance for the Edwards Air Force Base Wastewater Treatment Plant
- Served as project engineer for the City of Oxnard's Del Norte Blending and Pumping Station project; prepared the City of Oxnard's Del Norte Blending Station and Pipeline Feasibility Study
- Served as resident engineer on the City of Oxnard's North East Industrial Assessment District Phases 5, 6 & 7 improvements project
- Provided design and inspection services during construction for the Las Virgenes Municipal Water District's Phase II - Headquarters Operations Facilities Improvements project
- Provided design and inspection services during construction for the Ronald Reagan Presidential Library's Madera Road Tank, Pump Station, Miscellaneous Site Improvements, and Sewage Lift Station projects
- Served as project engineer for the Las Virgenes Municipal Water District's 3.0 Million Gallon Cordillera Reclaimed Water Tank and 24-inch Diameter Transmission Pipeline.

#### **Affiliations**

American Society of Civil Engineers  
American Water Works Association  
Association of California Water Agencies  
Association of Water Agencies of Ventura County  
Channel Counties Water Utilities Agencies  
Water Reuse Association  
American Groundwater Trust

## **Lynn M. Takaichi, P.E.**

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Chairman

### **Education**

MS in Civil Engineering (Sanitary), University of California, Berkeley, 1972  
BS in Civil Engineering, University of California, Berkeley, 1971  
Special Study in Environmental Impact Assessment, University of California  
Study in City and Regional Planning, University of California  
Study in Water Resources Planning Civil Defense Preparedness Agency, Certificate of Achievement in Multi-Protection Design, University of Hawaii

### **Registration**

Civil Engineer in California

### **Professional Summary**

Mr. Takaichi is responsible for major planning and design projects, particularly assignments involving complex institutional and financial arrangements. He has directed a wide range of water projects including water resource studies, water system master plans, water treatment investigations; water facilities design and utility management plans. In addition, he has managed the preparation of numerous environmental impact assessments.

He currently serves as the Agency Engineer of the Castaic Lake Water Agency. In addition, he serves on the Los Angeles County Reclaimed Water Advisory Committee, ACWA's Safe Drinking Water Act Subcommittee, and the Technical Criteria Committee for the Urban Runoff Pilot Project of the Santa Monica Bay Restoration Project.

Mr. Takaichi has particular expertise in complex institutional arrangements and he works closely with specialized legal counsel, financial consultants, and water managers. His experience includes water agency formation, drafting of enabling legislation, negotiation of water supply and water service agreements, development of annexation policies and agreements, and management of a wide variety of water programs. He also has expertise in water system appraisals and has assisted numerous public agencies with the acquisition of investor-owned utilities.

### **Water Quality and Treatment**

In the area of water quality and treatment, his experience includes:

- Planning, design and construction management of a 3.0 MGD desalination demonstration plant for the Port Hueneme Water Agency. (Received 1999 CELSOC Honor Award for Engineering Excellence.)
  - Feasibility study of a new water treatment plant for the City of Port Hueneme.
  - Value engineering and 30 percent design of a 300-gpm seawater desalination plant for the Cambria Community Services District.
  - Stochastic model of chloride discharges to the Santa Clara River for the County Sanitation Districts of Los Angeles County.
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- Stochastic model of chloride discharges within the Calleguas Creek Watershed for the Fox Canyon Groundwater Management Agency and Calleguas Municipal Water District.
- Preliminary evaluation of the potential use of freeway dewatering water as a water supply for the City of Downey.
- Planning, permitting and design of a 3500 gpm MTBE removal plant for the City of Santa Monica and several oil companies.
- Evaluation of alternatives to the 100 cfs Stone Canyon Filtration Plant proposed by the Los Angeles Department of Water and Power.
- Planning, design and construction management of the 30 MGD Rio Vista Water Treatment Plant (expandable to 90 MGD) for the Castaic Lake Water Agency. (Received 1995 CELSOC Merit Award for Engineering Excellence.)
- Proposal evaluation, contract assistance, and evaluation of operational problems to the City of Pomona for the turnkey construction of a 15 MGD nitrate removal plant (ion exchange).
- Facilities plan for expansion of the Earl Schmidt Filtration Plant from 25 to 50 MGD for the Castaic Lake Water Agency.
- 10,000-gpm air stripping facilities and expansion of the Arcadia Water Treatment Plant for the City of Santa Monica. (Received CEAC's 1992 Grand Award for Engineering Excellence.)
- Facilities plan and design of the expansion of the Earl Schmidt Filtration Plant from 12.5 to 25 MGD for the Castaic Lake Water Agency.
- Design of 2,000-gpm wellhead treatment plant to remove iron/manganese and hydrogen sulfide for the Goleta Water District.
- As a consultant to AWWA's Safe Drinking Water Act TAW, he was the Officer-in-Charge of an evaluation of issues related to the reauthorization of the Safe Drinking Water Act and has recently been involved in the development of case studies throughout the U.S. to assess impact of the Safe Drinking Water Act regulations. He has also managed cost of compliance studies of the proposed radionuclide regulations for AWWA's Radionuclide TAW and the Association of California Water Agencies (ACWA). He is currently of Officer-in-Charge of a cost of compliance study of the proposed arsenic regulation for ACWA and two research projects funded by the AWWA Research Foundation: a critical assessment of radon removal systems and the development of protocols for cost of compliance studies (under subcontract to RCG/Hagler, Bailly).

#### **Affiliations**

American Society of Civil Engineers  
American Water Works Association  
National Society of Professional Engineers  
Society of American Military Engineers  
Water Pollution Control Federation



Attachment D  
GREAT Program Desalination Facility  
Budget Summary



Task	Salaries and Wages	Fringe Benefits	Supplies	Equipment	Services or Consultants	Travel	Other Direct Costs	Total Estimated Costs	Cost Shared By City	Requested Budget
1. Project Management	\$12,000	\$2,880	\$500	\$0	\$0	\$0	\$0	\$15,380	\$15,380	\$0
2. 10 Percent Design	\$5,000	\$1,200	\$0	\$0	\$88,000	\$0	\$0	\$94,200	\$6,200	\$88,000
3. 50 Percent Design	\$12,000	\$2,880	\$0	\$0	\$235,000	\$0	\$0	\$249,880	\$14,880	\$235,000
4. 75 Percent Design	\$6,000	\$1,440	\$0	\$0	\$118,000	\$0	\$0	\$125,440	\$7,440	\$118,000
5. 90 Percent Design	\$5,000	\$1,200	\$0	\$0	\$88,000	\$0	\$0	\$94,200	\$6,200	\$88,000
6. 100 Percent (Final) Design	\$3,000	\$720	\$0	\$0	\$59,000	\$0	\$0	\$62,720	\$3,720	\$59,000
7. QA/QC	\$4,000	\$960	\$0	\$0	\$0	\$0	\$0	\$4,960	\$4,960	\$0
8. Permitting	\$5,000	\$1,200	\$0	\$0	\$50,000	\$0	\$0	\$56,200	\$6,200	\$50,000
9. Interagency Agreements	\$5,000	\$1,200	\$0	\$0	\$20,000	\$0	\$0	\$26,200	\$6,200	\$20,000
10. Public Outreach	\$7,000	\$1,680	\$0	\$0	\$7,000	\$0	\$3,000	\$18,680	\$11,680	\$7,000
<b>TOTAL</b>	<b>\$64,000</b>	<b>\$15,360</b>	<b>\$500</b>	<b>\$0</b>	<b>\$665,000</b>	<b>\$0</b>	<b>\$3,000</b>	<b>\$747,860</b>	<b>\$82,860</b>	<b>\$665,000</b>